DOCUMENT RESUME

ED 054 015 SO 001 343

AUTHOR Hunt, F. J.
TITLE The Study of Education.
PUB DATE May 70
NOTE 17p.
AVAILABLE FROM Dr. J. J. Hunt, Monash University, Department of Education, Wellington Road, Clayton, Victoria, 3168, Australia (No Charge)
JOURNAL CIT The Australian University; v8 n1 p41-56 May 1970

EDRS PRICE EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS Education, *Educational Diagnosis, Educational Principles, *Educational Research, Educational Sociology, Research and Development Centers, Research Design, *Social Sciences, *Social Systems, *Systems Approach

ABSTRACT

This essay undertakes to develop a perspective from which education as a research area can be more clearly perceived and more meaningfully comprehended. It attempts to do so by locating the study of education within the larger context of the study of man and of society. In the study of man and society, three major sectors of research are identifiable: 1) man as an individual; 2) social groupings in which man acts; and, 3) particular areas of activity in which men in groups and societies engage. A principle which can be used to identify an area of study in education is the concept of dependent and independent variables. In education, the dependent variables are many and include the learning process, the teacher-pupil relationship, the classroom, the school, a system of schools or the total system of education within a society; it is as complex as a total society, and as amenable to study from the full array of social disciplines. Consequently, many approaches are appropriate and necessary, if understanding is to be systematically and comprehensively extended. This view could lead to the establishment of centers for the study of education which would draw researchers from all of the social sciences. (Author/AWW)

THE STUDY OF EDUCATION

F. J. HUNT*

Although the study of education has emerged as a major area of research and theorizing, its characteristics and justification as an area are not readily to be grasped. Indeed, a good deal of divergence of opinion and even of confusion prevails which results in some lack of clarity concerning approaches to employ in undertaking educational research and reluctance on the part of some research workers to undertake research in education.[1]

The present article undertakes to develop a perspective from which education as a research area can be more clearly perceived and more meaningfully comprehended. It attempts to do so by locating the study of education within the larger context of the study of man and of society.[2] In that way, broad divisions can be traced and the part of particular disciplines can be indicated. Then, distinctive features of education can be shown, together with a justification offered for the establishment of centres to study education. Because of the limited length of the paper, it cannot be hoped to pursue this analysis exhaustively: an attempt will be made simply to indicate the lines that a more rigorous and comprehensive analysis would take and conclusions that such an analysis could be expected to support.

In the study of man and society, three major sectors of research are identifiable. The first of these may be categorized as concerned with the study of man as an individual or as an

* Dr F. J. Hunt is Senior Lecturer in Education in Monash University.

[1] Some factors associated with a reluctance among sociologists to undertake research in education are discussed in Neal Gross, 'The Sociology of Education', *Sociology Today*, Robert K. Merton *et al.*, editors, New York, Basic Books, 1959 and in Orville G. Brim, *Sociology and the Field of Education*, New York, Russell Sage, 1958. It should be noted that these factors appear to operate to a much lesser extent than they may have done when Gross and Brim commented on the situation.

[2] To locate education in this context is to locate it within a more limited context or framework than ones such as those proposed by Philip H. Phenix, 'The Architectonics of Knowledge', and Joseph T. Tykociner, 'Zetetics and Areas of Knowledge', *Education and the Structure of Knowledge*, Stanley Elam, editor, Chicago, Rand McNally and Company, 1964.

organism—the point or points of interest to psychologists in particular and specialists in certain other disciplines such as biochemistry and physiology. The second major sector of study may be categorized in terms of the social groupings in which man acts, interacts and engages in a variety of activities—points of interest to sociologists, anthropologists, historians and others. A third major category of study may be identified as concerned with particular areas of activity in which men in groups and societies engage, or with specific sectors of society—points of interest to economists, political scientists, and others.

Each sector is differentiable partly because of relationships between disciplines within an area and partly because of the character of relationships between disciplines in different areas.

Man as individual or organism

Several disciplines are identifiable as primarily concerned with the study and understanding of man as an individual or as an organism. Within the social-behavioural field, psychology is a major contributor. In addition, however, it is of considerable interest to note an emergence and, possibly, convergence of interest among some psychologists, biologists, biochemists and other types of specialists engaged in a wide range of attempts to explain human behaviour.[3] While a central point of concern or the dependent variables continue to be the explanation of behaviour of man as an individual and as an organism, the range of independent variables employed in the explanation process has broadened.

It is by this principle of dependent-independent variables that apparently overlapping areas such as psychology and sociology or, more particularly, between different strands of social psychology can be differentiated.[4] In the one case are social

[3] An illustration of the range of specialists who are interested in behaviour, and of discipline approaches and contributions is given in *Psychobiology—The Biological Bases of Behaviour*, Readings from the *Scientific American*, San Francisco, W. H. Freeman and Company, 1967.

[4] Distinctions in these terms are drawn by Gordon W. Allport 'The Historical Background of Modern Social Psychology', *The Handbook of Social Psychology*, Second edition, Gardner Lindzey and Elliott Aronson, editors, Reading, Mass., Addison-Wesley Publishing Company, 1968, and Alfred R. Lindesmith and Anselm L. Strauss, *Social Psychology*, New York, Holt, Rinehart and Winston, 1968.

psychologists who explore the relevance of social variables such as group structure or norms and other elements of culture in the explanation of individual behaviour. In the second case are social psychologists-sociologists whose interest is in the relevance of aspects of individual behaviour to the functioning of social systems. For these, the individual and his characteristics are independent variables that are useful in extending understanding of the dependent variables of social structures and associated processes. For the former category of psychologically-oriented social psychologists, the individual is the dependent variable or set of dependent variables to be understood while social factors constitute essentially independent variables.

A further important distinguishing feature of studies of the individual are the sources and types of data and the techniques or elements of research methodology employed. Common sources of data are tests of individual performance in cognitive, affective and motor areas of activity. These are distinguishable from measures of bureaucracy, cohesiveness, productivity, birth-rate and other aspects of structure and relationships that are employed by social scientists to provide data on essentially group phenomena.[5] Corresponding differences, with some sharing and borrowing notwithstanding, can be identified in the types of instruments employed to gather data.

Man in social groupings

A second set of disciplines can be said to take social groupings as the starting point for deriving their several points of concern. There is, first, the past which, it is claimed, is relevant to an understanding of the present. This is commonly identified as the focus of history, but it is important to recognize that

[5] Collective, group and organizational variables and their measurement are discussed on a number of occasions. Note, for example, Allen H. Barton, 'Organizational Measurement and Its Bearing on the Study of College Environments'. *Readings on Modern Organizations*, Amitai Etzioni, editor, Englewood Cliffs, New Jersey, Prentice-Hall, 1969, Ingvar Svennilson *et al.*, *Targets for Education in Europe in 1970*, (Paper prepared for the Policy Conference on Economic Growth and Investment in Education, Washington, 1962), Paris, O.E.C.D., 1962, and Paul F. Lazarsfeld and Herbert Menzel, 'On The Relation Between Individual and Collective Properties'. *Complex Organizations*, Amitai Etzioni, editor, New York, Holt, Rinehart and Winston, 1961.

archaeology complements history in studying aspects of the past, and by means of different methods of inquiry, and on the basis of different forms of evidence. Extension of interest beyond man leads into other studies of the past such as palaeontology and geology. But history and archaeology together comprise a set of disciplines whose interest is in one aspect or another of the past of human societies and of human activities, and whose research efforts yield a picture of that past and of the background against which present behaviour and activity may be understood.

A second approach to the study of social groupings is represented in the work of anthropologists. Their interest is, typically, comprehensive or holistic, with emphasis given to cultural patterns for living. A concern for the comprehensive perspective suggests a similarity with the synthesizing approach of historians. A second concern for first-hand experience through interaction within a society distinguishes anthropologists from historians and also appears to restrict them to the study of small-scale societies or of small-scale groupings such as communities, ethnic, religious or other groups in modern complex societies.

In general, it can be said that neither anthropology nor history contribute substantially to the study of modern complex societies, as these function in the present. Some ascribe this task to sociologists but to do so is to misrepresent sociology and overlook the contributions of economists, politicial scientists and other types of specialists. More rigorous and refined conceptualizations of sociology identify its interest as being in social structure and systems of social interaction. Although this is a more limited interest than society, it is still a pervasive interest and is associated with the study of structure and interaction in all types of groupings within a society. But the groups and societies are largely contexts in which structure and interaction can be studied, and are studied incidentally rather than as total entities.

A further, largely complementary, area of study is geography with a focus on spatial distributions and relationships between

phenomena, and on areal interaction and interrelationships. Out of this focus emerges a considerable interest in culture, social structure and other areas of study and it is apparent that important relations exist between physical environment and social structures and patterns for living. The relationship is also interactive and the interest is reciprocated with a consequence that both anthropologists and sociologists have found it useful to take account of the physical context of a society in examining culture and social structure and interaction in a society.

Still another area of study that is relevant to the study of man and society and appears appropriate for grouping within this particular category is biology. Its contribution stems from an interest in species, in man as a particular species, and in relation to his physical environment, including other types of species. Biology is commonly identified as a study within the more general area of life sciences and even in conjunction with the physical sciences. Such distinctions appear to be losing some of their significance, however, and developments in recent years illustrate extension of understanding concerning relationships between biological and both psychological and socio-cultural variables and a convergence in the work interests of specialists in sectors within the separate disciplines.

A more thorough analysis of the study of man and society would need to take account of a larger range of disciplines including rapidly developing areas of study such as ecology. For present purposes it may be sufficient to comment that there is a sense in which geography, anthropology, sociology, biology and other disciplines can be seen to be both similar and complementary to each other. Collectively, they share an interest in major aspects of a society such as the system of beliefs, values, customs and other elements of patterns for living; the system of groupings and the structure of those groupings; the physical environment, including other types of species of which man is a member-type; and the social and spatial distributions and interrelations between phenomena. For such reasons they may be grouped together as disciplines concerned with the study of aspects or elements of contemporary man and societies, and with relationships between those elements. In addition,

history, along with archaeology and other disciplines interested in aspects of the past, are relevant in that virtually all phenomena have a past and so there can be study of the past of each of these sets of phenomena and of relationships between them.

An associated interest in the functioning of these groupings leads specialists in the several disciplines to be interested in the study of processes. A major interest of many anthropologists, for example, is the transmission of culture and the changes which may occur in a cultural system or to elements of one during the transmission process. Although there are some similarities, there are also important differences between 'cultural' transmission as studied by anthropologists and by sociologists. In the one case, emphasis is typically on culture or aspects of culture and changes that occur to these. In the second case, interest stems from curiosity about the continuity of social systems and learning of behaviour appropriate to occupancy of particular social positions. Cultural transmission is also of interest to psychologists but again that interest may be seen to be distinctive and emerge out of studies of the learning process; that is the focal point more or less independently of whether the learning content is social, cultural or in other forms.

Specialists in each of these disciplines are also interested in such phenomena as power and processes involved in achieving or maintaining order and control; in material needs and wants and their satisfaction, including the means of satisfying those needs and wants, in reproduction and generation, in interpreting the meaning of life, and in activities through which feelings and thoughts about man and the situations in which he exists are expressed. It is out of those interests that specialized areas of study within the several disciplines have emerged, with major areas including economic geography, anthropology, sociology and history, and political geography, anthropology sociology and history. In addition, a variety of other areas such as religious activity, the learning process and family life have been studied by sociologists, historians, anthropologists and geographers in varying degrees, and specializations such as religious and educational sociology, history and anthropology are emerging.

Such is the interest of specialists in some of these disciplines that attempts have been made to develop systematic analyses of the processes or functions occurring within groups and societies as such. Sociologists—for example, Parsons and Bales—have argued that the functional prerequisites of goal attainment, adaptation, integration and pattern maintenance identify those tasks which must be performed if a society or group is to continue in existence.[6] Comparable interpretations have been offered by Bennett and Tumin in terms of cultural imperatives,[7] and by Aberle and others.[8]

Man and his activities

It will be recognized that in specifying processes we have arrived at the points of focus of a third set of disciplines comprising economics, political science and some others which are in varying stages of development. This third set may be identified as sharing an interest in certain conditions and problems confronting man in his social groupings and in systems of activity or sectors of society which operate in relation to those conditions and problems. One such problem arises from the condition of scarcity in relation to material needs/wants and economics can be identified as the discipline which has evolved to study that condition and the associated system of activity or sector of society. Disorder, control, co-ordination, the exercise of power, the making and enforcement of rules is another area of conditions, problems and activity in social groupings and the one which is the focus of interest for political scientists. Similarly, a condition of potential for human development and characteristics of tasks to be performed in human societies, and

[6] The functional pre-requisites were discussed initially in Robert F. Bales, *Interaction Process Analysis: A Method for the Study of Small Groups*, Cambridge, Mass., Addison-Wesley, 1950, Chapter 2. They were developed further by Talcott Parsons *et al.*, *Working Papers in the Theory of Action*, Glencoe, Illinois, The Free Press, 1953, Chapter 3. It has been employed again in Talcott Parsons, *Societies: Evolutionary and Comparative Perspectives*, Englewood Cliffs, New Jersey, Prentice-Hall, 1966, Chapter 2.

[7] John W. Bennett and Melvin M. Tumin, 'Some Cultural Imperatives', *Cultural and Social Anthropology*, Peter B. Hammond, editor, New York, The MacMillan Company, 1964.

[8] D. F. Aberle *et al.*, 'The Functional Pre-requisites of a Society', *Ethics*, 60: 100-11, January, 1950.

the processes of learning and teaching, constitute points of interest for educationists. Similar comments can be made with respect to legal, religious, expressive and other areas of activity in societies and other social groupings, although not all such areas have as yet given rise to research specializations.

These several areas of study bear similarities to each other in that each focusses upon a process or a particular set of processes and a system of activity occurring within social groupings, or upon a sector of society such as the economy or the polity. In that respect they can be said to be complementary in their points of focus and as areas of study. As systems of activity, they are also quite complex, involving people behaving as individuals/organisms, interacting in structured groups and in relation to a shared culture or, perhaps, sub-culture, spatially distributed in a physical environment, and existing and evolving over time and in relationship with aspects of the society of which a system of activity is part. Correspondingly, a complex approach to the study of each system of activity is required, and it is that complexity which has led on the one hand to interest in economic, political and other forms of activity among psychologists, historians, geographers, sociologists and anthropologists, and which is matched by the diversity of approaches which have emerged in the study of particular systems of activity. Thus, economics, for example, includes such specializations as economic history, business administration, political economy, economic geography and labour relations. Similarly, a variety of specializations relating to history, sociology and other disciplines have emerged in the study of political systems. That is, departments in politics and economics and some other studies of systems of activity appear to be increasingly multidisciplinary in character and relate closely to other disciplines such as history, sociology, geography and psychology.

Education as an area of study

It is now possible to identify characteristics of education as an area of study. References to politics and economics have indicated bases for identifying points of concern of educational studies and approaches to those studies. It remains to give

explicit attention to this question and then to consider possible advantages that can flow from the existence or establishment of areas of study such as education.

A principle which can be used to identify an area of study in education as well as elsewhere is the concept of dependent and independent variables. That which is of primary interest to specialists in a discipline can be regarded as its dependent variable or set of dependent variables. Those factors which operate upon the phenomena of primary interest, and whose relevance to that interest is to be studied, can be regarded as the independent variables. This is a conceptual device—an analytical tool—adopted for its convenience and usefulness and not for any reference to conditions necessarily inherent 'in nature'. What is a dependent or independent variable in one set of circumstances can be otherwise under different circumstances. What is an independent variable in the case of the study of education can be a dependent variable in the case of the study of political systems. The dependent-independent variable conceptualization is a convenient device for indicating the focus and emphasis of interest.

In education, the dependent variables are many and include the learning process, the teacher-pupil relationship, the classroom, the school, a system of schools or the total system of education within a society. Not all are dependent variables to the same educational specialist: characteristics of classrooms, teacher-pupil relationships or school systems may be independent variables operating upon the learning process—a dependent variable. But at one time or another, to one student or another of the functioning of educational systems of activity, each element that comes within such a system is likely to be selected as the object of primary attention.

To a considerable extent the principles of selection appear to derive from the framework of other established disciplines.[9]

[9] For a selection of discussions which examine a variety of approaches to the study of education see J. W. Tibble (editor), *The Study of Education*, London, Routledge and Kegan Paul, 1966; George F. Kneller (editor), *Foundations of Education*, Second edition, New York, John Wiley and Sons, 1967; and Ivor Morrish, *Disciplines of Education*, London, George Allen and Unwin, 1967.

Psychologists are interested in the learning process, and educational studies of that process are commonly undertaken by educational psychologists. Sociological interest in the functioning of social groupings is carried across into the study of educational groupings—classes, schools, colleges and larger systems —and draws upon the conceptual framework and resources of techniques of sociologists in those studies. Anthropological interest in cultural and subcultural systems of values, beliefs, customs and so on have given rise to a similar interest and approach to the study of those aspects in the educational system of activity.

In addition to the socio-cultural context of the learning process, there are also economic, political and other aspects to the educational system. Educational activity is undertaken in a condition of scarcity relative to available resources so that it is possible to apply economic conceptual frameworks, models and techniques to the study of aspects of educational activity.[10] Similarly, disorder and control, policy making, rule making and enforcement and other forms of political activity and processes are as much part of education as they are of a society as a total entity, and correspondingly can be studied as a particular type of political process in a specific type of situation.[11]

The position is, as was pointed out earlier, that a system of activity such as education is as complex as a total society, and as amenable to study from the full array of social disciplines as is society. Consequently, many approaches are appropriate for the study of the many aspects of education, and all may need to be employed if understanding of education is to be systematically and comprehensively extended. Again, it is not sufficient for a single area such as learning to be studied: attention must be given also to educational groupings, to use of resources,

[10] Several economic analyses of the functioning of education are presented in *Readings in the Economics of Education*, Paris, UNESCO, 1968, Section IX—'The Content and Locus of Education and its Economic Effectiveness'. Note, for example, A. Marshall, 'General and Technical Education', P. J. Foster, 'The Vocational School Fallacy in Development Planning' and Mary Jean Bowman, 'The Land Grant Colleges and Universities in Human Resource Development'.

[11] See, for example, Norman D. Kerr, 'The School Board as an Agency of Legitimation', *Sociology of Education*, 38: 34-59, Fall, 1964.

to systems of policy making and control, to the technical aspects of equipment and facilities, to the past and to the physical context of education.

But even study of the whole system of education, including specialized approaches to the study of particular aspects, does not provide an adequate basis for establishing understanding or for building a theory of education. A system of education is essentially a dependent or interdependent sub-system, occupying a place in a larger social context and functioning in relation to social, political, economic, religious and other sub-systems within a society, and affected by type of government and type of government policies,[12] by characteristics and conditions of the economy,[13] by religious values and the activities of religious organizations,[14] by characteristics of family and community life,[15] by the demographic characteristics and spatial distribution of a population,[16] and by a number of other factors.

[12] E. G. West, *Education and the State*, London, Institute of Economic Affairs, 1965, examines some consequences of policy for educational practices and indicates some dysfunctions for education as arising from the operation of political processes. Again, P. N. Gill, 'The Federal Science Grant: An Episode in Church State Relations, 1963-1964, *Melbourne Studies in Education, 1964*, E. L. French, editor, Melbourne, Melbourne University Press, 1965, discusses a political 'incident' which has had a substantial impact on the functioning of educational institutions.

[13] Relations between the economy and education are discussed on a number of occasions. Note, as examples, V. E. Komarov, 'The Relation between Economic Development and the Development of Education' and Friedrick Edding, 'International Trends in Educational Expenditures', *Readings in The Economics of Education*, Paris, UNESCO, 1968.

[14] Influence of religious organizations on the functioning of educational systems has been documented extensively in historical studies. Contemporary studies are less common but examples of both are to be found in *Church and State in Education*, The World Year Book of Education, 1966, George Z. F. Bereday and Joseph A. Lauwerys, editors, London, Evans Brothers, 1966. Note especially, Joseph S. Roucek, 'The Churches and the Control of the Curriculum with special reference to the United States'.

[15] Studies of the relevance of social background factors are comprehensively reviewed in Robert Perucci, 'Education, Stratification and Mobility', *On Education—Sociological Perspectives*, Donald A. Hansen and Joel E. Gerstl, editors, New York, John Wiley and Sons, 1967.

[16] Implications of population growth for education are discussed in W. D. Borrie and Geraldine Spencer, *Australia's Population Structure and Growth*, Melbourne, Committee for Economic Development of Australia, 1965, especially pp. 76-9 and in *Tertiary Education in Australia*, Report of the Committee on the Future of Tertiary Education in Australia to the Australian Universities Commission, Volume 1, Canberra, Government Printer, August, 1964, pp. 24-36.

Because of these relationships many aspects of society are relevant as independent variables to the study of educational systems. Accordingly, it is almost inevitable that an interest in understanding education must lead out to study of factors external to the educational system of activity, but which operate upon it and influence the ways in which it functions as a system of activity.

A second direction in which educational studies are likely to lead out from the educational system is in relation to the consequences of the functioning of the educational system of activity. One aspect of this interest concerns outcomes of learning in such forms as religious education,[17] political socialization,[18] human resource development,[19] and other areas or aspects of development.

In one sense it can be argued that these questions or issues are more appropriate for students of the political system, the economy, religious and other areas of activity: education is an independent variable or a set of independent variables for those systems. Certainly other social scientists have been busy on those questions, as a large and rapidly growing literature (some of which has been cited above) testifies. But it is not an area or set of areas that educationists can afford to neglect. The study of economic, political, religious and other learnings and of various forms of behaviour is one way of arriving at an assessment of the efficacy of the functioning of educational

[17] Consequences of education for religious behaviour and activity have been studied by A. M. Greeley and P. H. Rossi, *The Education of Catholic Americans*, Chicago, The Aldine Press, 1965, and by J. J. Mol, 'The Effects of Denominational Schools in Australia', *Australian and New Zealand Journal of Sociology*, 4: 18-35, April, 1968.

[18] Studies of consequences of education for the functioning of political systems are presented in James S. Coleman, *Education and Political Development*, Princeton, New Jersey, Princeton University Press, 1965 and in 'Political Socialization', *Harvard Educational Review*, Volume 38, Number 3, Summer, 1968.

[19] The consequences of the functioning of education systems for the economy are the focal point of a number of publications on the economics of education. See, for example, C. Arnold Anderson and Mary Jean Bowman (editors), *Education and Economic Development*, Chicago, Aldine Publishing Company, 1963; E. A. G. Robinson and J. E. Vaizey (editors), *The Economics of Education*, London, MacMillans, 1966 and *Readings in the Economics of Education*, Paris, UNESCO, 1968.

processes, and clarifying the significance of what is done in education.

It is not difficult, then, to specify a domain for educational studies. In the present case, recourse has been made to the dependent-independent variable model in identifying such a domain. Other models, such as systems analysis[20] or structural functionalism[21] could be employed and lead to similar statements of domain. Thus an educational domain or set of concerns can be specified largely by employing available analytical frameworks in conjunction with existing discipline perspectives.

Centres of study

The identification of an area does not of itself constitute justification for establishing special departments or centres to undertake study of such areas, and it is to this question that we now turn.

In the first instance, it may seem likely that the establishment of new centres of study in some of these areas would result in a good deal of duplication of effort and uneconomic use of resources. It can be argued that research in history, sociology, anthropology and other disciplines will explore fully into political, economic, educational, religious and other areas of activity. Furthermore, the existence of specializations such as the sociology of religion, education or politics, or social, political or economic history within sociology or history indicate progress that has been made in that direction.

Despite the examples that can be cited, it appears that a case made on that basis is misleading. Examination of the range of research in particular areas reveals that important aspects are neglected, and that gaps exist in knowledge about and understanding of a particular area of activity. One reason for that state of affairs can be suggested.

[20] For a discussion of education in systems terms, see Philip H. Coombs, *The World Educational Crisis: A Systems Analysis*, New York, Oxford University Press, 1968.

[21] A closely related institution, namely the family, is analysed in structural-functional terms in N. W. Bell and W. F. Vogel (editors), *The Family*, Glencoe, Illinois, The Free Press, 1960. An analysis of some functions of education is given by P. W. Musgrave, *The Sociology of Education*, London, Methuen, 1965, Part II.

It has been argued that discipline specialists focus their interests on a particular set of points of concern. It can be further argued that despite a wide-ranging pursuit of an interest, research and discussion generally relate back to the central points of concern. Although sociologists, for example, may pursue their interest in structure and interaction into small and large groups, into formal organizations such as factories, gaols, hospitals and schools, into communities, ethnic groups and social classes, their interest in these groupings is typically incidental to the study of problems relating to role, stratification, deviance, or other aspects of structure and interaction.[22] The school or hospital constitutes a setting in which such phenomena and processes may be studied and are not necessarily of great interest in themselves. It may be for reasons such as this that sociologists can say a good deal about stratification, for example, and the operation of factors such as education upon the stratification system but, relatively, have neglected study of the effects of stratification systems on educational systems, and ways in which social 'demand' may 'call' a stratified system of schools into existence.

Similar areas of neglect can be identified in research in counterpart areas such as politics and economics in relation to education. Political scientists, for example, have found it fruitful to examine consequences for political activities arising from the functioning of educative activity. This has led to research into areas such as political socialization and to increased understanding of the functioning of political systems. But although there is a good deal of speculative discussion in the literature, little empirical study has been made of, for example, consequences of the functioning of different types of political systems on education. Similarly, economists have been interested in education in so far as it influences productivity or other aspects of the economic system but, relatively, have neglected implications of the economy for education.

[22] For an example of a study in education which is primarily concerned with making a contribution to the more general area of role theory see Neal Gross *et al., Explorations in Role Analysis: Studies of the School Superintendency Role*, New York, John Wiley and Sons, 1958.

A second point that can be made is to indicate a number of disciplines that have developed rapidly once they were established 'in their own right' and freed from the constraints of a 'mother' discipline. Psychology, sociology and politics are examples of such disciplines: prior to the gaining of independence the areas and types of questions explored were considered from the perspectives of philosophy, history or some other established discipline. Typically, autonomy has given rise to a rapid expansion in research, and to the development or modification of techniques more appropriate to the study of the freshly perceived and redefined area.

A third advantage from establishing particular types of centres is that the step enables a variety of specialists of diverse backgrounds but with an interest in a given area of activity to come together in their work. There would seem to be substantial gains to be achieved when historians, sociologists, psychologists, and others who are specifically interested in political, educational, economic or other areas of activity can associate together in a joint undertaking such as a school of study.

This is not to argue that all who are interested in the study of education, politics or the economy should join centres for the study of those areas of activity. While there is merit in sociologists who are interested in education being able to work with psychologists, historians or anthropologists who are also interested in education, there is also merit in a sociologist interested in education being able to work with other sociologists whose interests may be in the political or economic systems, family life, religion or some other aspect or set of aspects of social interaction. Thus, there are a number of ways in which research workers may associate together and the advantages of each appear to be related to the research interest and orientation of the particular research worker.

These considerations suggest one reason for undertaking the establishment of centres for the study of specific areas such as education, the economy, religion or the political system: it is a means to advance systematic study of a particular area of activity. The step appears to result in the given area being adopted as a point of focus or as a set of dependent variables

while other phenomena such as culture, social structure, the physical environment—those elements of particular interest to specialists in other areas and disciplines—are examined as independent variables. This leads to a good deal of interest in essentially the same phenomena among specialists in a number of different places but the result is not necessarily overlapping and duplication to any serious extent. The variation in degree of emphasis of interest appears to result in different types of questions being asked of a given broad area of interest, and findings or conclusions being related to discussions of different types of questions or issues, and to offer important returns in terms of contributions to the understanding of the complex system of phenomena called society.